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ABSTRACT

A modified focus group approach was used to assess the perceptions of teachers involved in basic skills pilot site projects in Oklahoma after the second year. The two 5-year projects were implemented to develop, apply, evaluate, and advance approaches that strengthen basic competencies of students enrolled in vocational programs. Of the three applied courses--Applied Math, Principles of Technology (PT), and Applied Communications, teachers viewed Applied Math most favorably. Although instructors were also generally positive about PT, opinions about Applied Communications were not as positive. The main difficulty was that it was "really not English." Teachers felt a strong need for effective communication among teachers at individual schools, teachers at different schools, teachers and administrators, and school personnel and the community. They noted the following changes and outcomes: changes in the students, especially in the applied math courses; increased communication among teachers; and changes in teachers, such as changed teaching style, different view of basic skills, and different view of vocational education. Teachers were supportive of the basic skills program. Three main areas of advice were given: (1) basic skills enhancement needs to begin early, before students are juniors and seniors in high school; (2) teachers need to communicate often and effectively with one another; and (3) teachers should take advantage of workshops and others who can help. (YLB)

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THE IMPACT OF APPLIED ACADEMIC SKILLS IN VOCATIONAL AND NONVOCATIONAL CLASSROOMS AS SEEN BY TEACHERS: A Focus Group Study

Oklahoma Basic Skills
Pilot Project

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Introduction

In 1987, two five-year pilot projects began in Oklahoma with the goal of developing, applying, evaluating, and advancing "approaches that will strengthen the basic competencies -- in communications, mathematics, science, critical thinking, and problem-solving -- of students enrolled in vocational programs" (SREB Review Team Report, 1989). These projects, conducted in cooperation with the Southern Regional Educational Board's Vocational Education Consortium, have been in place for two full school years.

In order to assess the perceptions of teachers involved in the basic skills pilot site projects, a modified focus group approach was used. The focus group technique attempts to gain information about a subject by engaging participants in discussion centered around a small number of questions. While specific answers to individual questions are important, what is of most interest are the group dynamics; that is, the interactions among all members of the groups.

One group was held at each site, with six teachers from the High Plains site and seven teachers from the Red River site participating. The teachers were from both vocational and nonvocational classrooms. Participating from nonvocational schools were teachers representing math, science, and English classes. All participants provided input into the group discussion. It seemed that the two groups shared similar feelings and opinions, and that the differences observed were more of degree than kind.

To guide the discussion, five primary questions were developed for the focus groups. These were: 1) what is your overall assessment of the pilot site project? 2) what works? 3) what have been specific outcomes at the basic skills pilot sites? 4) what should be done differently from here on out? and 5) if someone was starting such a project, what advice would you give them?

As stated previously, the main intent of the focus group is not to have specific answers from each participant to each question, but to gain a general understanding of where the individuals stand on the issues raised in the questions. This being the case, responses to one question often related to more than that one question. For example, when answering the first question, "what is your overall assessment of the pilot site project," teachers responded from the perspective of what worked for them, which was the second question.

Dividing this report into answers to specific questions would be an artificial representation of the group process. Instead, the report will address topics which emerged in response to the questions.

The following is a listing of those topics, in the order in which they will be addressed. First is a discussion concerning the applied courses, Applied Math, Principles of

Technology (PT), and Applied Communications. The second topic is the cooperation and communication among teachers, including specific committees which were formed as a part of the basic skills project. Third are outcomes observed as a result of the project. The fourth section of the report presents considerations for the project that the participants had about what should be done differently, or what persons at other schools who are considering a basic skills project should consider. The final section contains the conclusions.

In reading this report of these focus group sessions, it is important to remember the comments expressed by group members are not necessarily representative of the entire staff at the pilot sites. The purpose of a focus group is to gain an in-depth understanding of how certain individuals feel about a topic, rather than superficially survey a larger number of persons.

Applied Courses

Without question, the program which were viewed the most favorably is Applied Math. The teachers using this curriculum spoke highly about the materials. The following comment reflects the overall feelings about this course: "The only thing I can say is get rid of every general math class in high school and replace it with applied math. I would never go back to teaching general math; if I had a choice I would not. It's made me feel better as a teacher, and it's made my kids feel better as students."

The primary attraction of this course was that students easily recognize the direct application the materials have to the "real world." One teacher stated, "All the years before, and even in my algebra classes now, they say, 'when are we ever going to use this stuff?' After the first week or two in applied math, they don't ask."

A concern which was voiced about the mathematics materials was that it was written for students who had exposure to pre-algebra mathematics, and many of those taking the course were not at that level. This necessitated the instructor moving more slowly through the material. While this inability to complete all the material was of some concern, the expressed sentiment was that the students would learn well that material to which they were exposed.

Teachers were generally positive in their assessment of the Principles of Technology course, but some caution was expressed. There were two main reasons for the caution. The first was the difficultly in integrating the course into existing vocational courses, and the second was the importance of having the correct equipment and the time to familiarize oneself with the laboratory exercises before teaching the course.

One vocational teacher, who integrated PT into an existing class, said, "I kind of have some mixed emotions. I am still behind it a lot." This instructor went on to state that his students came in for specific vocational training and did not see the relationship between some of the PT material and the vocational program. The teacher felt that it would be most effective to pull out aspects of the PT curriculum which fit into the specific vocation. "Don't try to lockstep with a pre-existing program, because there is no

place to squeeze or make that kind of squeeze to do justice to the [vocational] program."

The academic teachers who were teaching PT expressed more favorable opinions about the program. One instructor stated, "I'm convinced every day that it is needed, that it's necessary; that it's necessary at the high school level or junior high prior to deciding your vocation."

As with the Applied Math, PT allowed students to immediately apply the knowledge to which they are exposed in class. Pupils were noted to say that they could use the information to 'soup up their cars.' Teachers noted that the lab exercises were an important component of the PT classes. In order for the laboratory exercises to work, a full set of equipment is needed. Not all classes have all the equipment at this time.

PT also provided opportunities to reinforce communication skills. On lab days in one class, "I won't tell which ones beforehand, that day. I say, 'You and you come up here and explain this to the class, what you're going to do.' They communicate what's going to happen, and then as many as we can go through and do the experiment." While this was a useful exercise, time constraints made it difficult to do this for every exercise.

Finally, instructors must devise additional activities on lab days for students who are not currently engaged in the lab activities. "When we just have one set [of equipment] and we can't set up another lab, there's a lot of people out there just messing around and it's hard to have them working on math skills and some other things." This problem was also faced by instructors of the Applied Math course.

While instructors are mostly positive about the Applied Math and PT courses, the opinions about Applied Communications were not so positive. The main difficulty expressed about the program was "that's really not English." As one teacher stated, "The material was just not applicable to the curriculum that we had to teach. When you have suggested learner outcomes in the state, and you have to meet that criteria, this doesn't match up with what we were required to do. In turn, we did what the state required instead of following a basic skills program."

At one site, participants felt the communications materials were life skills as opposed to English skills. At the other site, a distinction was made between English and the more focused communications. English teachers did not perceive that the materials provided instruction in language arts, and so they were not supportive of the course.

One group member stated that the modules were centered around various vocational areas, and since only one or two persons from each area was in the class, the other students felt the material did not apply to them. This teacher's recommendation was that the modules be integrated into the appropriate vocational classes.

Group members at each site proposed reasons why there were problems in the communications area. These were there were no corresponding "communications" courses taught at the vocational schools, and that English teachers as a group were very turf conscious and unwilling to give up traditional approaches to teaching English.

While these are perhaps reasons for the perceived failure of the communications programs, a lack of dynamic leadership is probably a major factor. One person involved in the communications aspect of the project stated "... but I don't know if the committee ever functioned. I felt like the committee function was a farce. It was a waste of our time because no one was teaching the course to come in and discuss what they were doing with it."

It was evident that this committee member felt that the communications effort should be centered on the course, and that no one on the committee took the initiative to lead the group in more effective communication.

In spite of the negative connotations regarding the communications course as a whole, teachers had positive remarks to make about individual portions. The most positive aspect of the program identified was the role playing. This part allowed students to practice conflict resolution in a simulated business environment.

Communication/Cooperation

A great deal of time was spent during each of the two sessions on the topic of communication. There appeared to be a strong need for effective communication among teachers at individual schools; teachers at different schools; teachers and administrators; and school personnel and the community, including parents and students. While many communication needs surfaced, instructors also discussed positive effects the project has had on communications.

Communication among teachers. In the discussion concerning communication among teachers, both positive and negative aspects were raised. On the positive side, teachers felt their teaching was stronger as they were aware of the skills being taught in other classes. "It helped me tremendously when we had our meeting at the vo-tech. I had no idea the amount of math they needed in machine shop."

This increased awareness of what was occurring in other classes was a positive aspect of the project. It also was negative, in that it made teachers realize how important it was to know about other classes, and how little they actually knew what other instructors were doing. As one teacher stated, "I think there's been more interaction (among teachers) since we've started the project. Personally I don't think there's been enough."

In addition to increased awareness of what was being taught in other classes, teachers were available to provide assistance and advice when needed. One teacher spoke about help she had received from instructors at her site who were teaching different classes; "You really need someone who has experience to give suggestions and ideas. It really helps to be able to talk to others doing similar things."

On the down side of the communications, a great deal of frustration was expressed concerning the need for more communication. This frustration resulted from two concerns. The first was the lack of time in which to meet and discuss the project with

others at one's own school and other schools. The second frustration stemmed from the perceived lack of support from persons in the administration.

One instructor stated that he had attended an out-of-state training session on basic skills. He received very helpful material which would be of benefit to other teachers. He stated that there was "no opportunity to tell the elementary teacher what I saw, no opportunity to the rest of the ... teachers. It's on the divan at home. You just don't get the chance to share."

One of the issues appeared to be ownership of the project. Persons at some of the schools appeared to believe that the purpose of the project was to bringing students into the vocational schools. "The meetings were [at the vocational school], and people say, 'Where's the money coming from?' People said, 'Vo-tech.' So it was like a vo-tech project." An interesting point is that some vocational instructors felt like the project was for the non-vocational schools, since the equipment went there.

At the outset of the project, it appeared that some vocational and academic instructors got off to a poor start. At some initial meetings, "the public school people were defensive because the vo-tech people were saying 'okay, [the students] are not getting this, and they're not getting this.' The public school teachers were saying, 'yes they are, because we gave it to them here, here, here, and here.' That was not the whole purpose. The whole purpose was just to reinforce and go back over, and it never got past that."

This issue was faced to some degree by all individuals and groups. Many were able to successfully resolve the issue and cooperate on the tasks before them. Some, however, were not able to get past-blame laying as to why students did not have the skills they needed.

Communication with administrators. Communication among administrators and teachers were considered very important, but effective communication did not seem to be consistently occurring. An important vehicle for communication between teachers and administrators were committees. These committees had differing degrees of effectiveness. As stated in the previous discussion, the communications committee did not appear to be effective. This was most likely due, in part, to a lack of effective leadership. However, other committees, such as those relating to math and science, appeared to function well.

In addition to sometimes ineffective communication, teachers appeared to feel there was not enough communication between teachers and administrators. One instructor stated, "I think probably the administration gets together and talks about what needs to be done and should be done, and they probably meet with the basic skills group and they discuss these and what classes and order the books, and you know, have it all planned for us, and then we come in and they say, 'this is what we need to do, and here it is.' Well, they haven't asked us, 'will this work? How much time will it take?' and stuff like this."

The above statement also brings out the feeling that assignments in the project are made somewhat arbitrarily. One instructor stated she had no idea why she was assigned to teach a specific course. Another stated she really enjoyed teaching the course to which she was assigned, but did not know if she would be allowed to teach it the following year.

When discussing the support needed for the project, group participants stated that many administrators did not evidence awareness of the project. One teacher stated, "I find myself wondering if the upper administration at the vo-tech knows anything about the basic skills project because I don't feel like it does."

While some teachers felt administrators were not aware of the project, others stated that some seemed to be in opposition to it until they became more fully informed. Attendance at a national conference appeared to change the attitude of one administrator.

The teachers in the focus groups saw themselves as the prime movers of the basic skills project. As one instructor stated, after a lengthy discussion on communication, "I hate to say this, guys, but what it's going to amount to is that teachers are going to have to take the horn by the bulls. I meant that the exact way I said it. I think if we don't do it, it probably won't get done."

Communication with parents/community. As with many other areas, teachers at both sites agreed that both students and others in the community needed to be more aware of the project. As one teacher stated, "I think we're a little behind on selling the community. For those students that are going into the vocational area that this [basic skills project] will get them so that they will have a better chance of excelling, therefore, making more money."

One vocational teacher stressed the importance of making parents aware of the importance of basic skills in vocations by relating, "When students come out here, in some cases, they don't feel they have to use proper grammar, and if we try to grade them on it, then we have these parents calling us, 'This is not an English class. Why are you correcting my daughter's work?'"

One school did provide the community an opportunity to learn about the programs, with some success. "We had an open house this year, and instead of just an open house, we did an expo. We had booths set up from all the different departments, and we had one for the PT. It was really neat, and the people who came in from the community were amazed at some of the things the kids were doing. They were just saying, 'What class is this again? I need to get my kid in that class.' As long as they didn't know it was basic skills, they'd be real impressed. I think the basic part makes them think that it's remedial."

An issue of some importance at each site was the importance of upgrading the image of vocational education, especially the knowledge and skills needed there. "There's been some parents that I've talked to, you know, suggesting that there child take certain

course in vo-tech, and, 'I don't want my child in there. They'll be labeled a dummy.' The parents need to know that they're not a dummy." Teachers stressed that many vocational courses were as rigorous as college preparatory classes. Another side to this issue is letting students know that they will need the academic subjects in vocational classes.

Outcomes

Members of each group stressed that it is too early to determine the full effects of the basic skills projects. "I'm not sure we've been involved in it long enough to see what kind of impact or changes made here have on our program. Basically, we started last year, really didn't get in the full swing until this year, so unless the students currently enrolled in some of the basic skills classes here and vocational classes at our schools, we're not going to see as much impact on them as we could. Maybe next year will be better." In spite of this caveat, which was expressed at both sites, group participants did note some changes.

The outcome cited most frequently was the changes in the students, especially in the applied math courses. The second outcome, in frequency, was the increased communication among teachers. Finally, some teachers indicated they had changed their teaching styles, had changed the manner in which they viewed basic skills, or had a different view of vocational education.

The effects of the project on students can best be summed up by the following quote, "Once they can do it, and see they can do it, all of a sudden there's a turn around. They know they're capable."

Also, "A lot of students, after they go through these applied courses, find out that they're not dumb after all." This sentiment was repeated by a number of teachers in each group. "It's amazing. I do have a few kids in [applied math] that have had algebra, and it's amazing when I have my special ed kids telling my algebra kids how to solve their problems. The confidence that it builds in those kids and the respect that it gives the other kids for them, because they can tell you how to do it, they just may not know their multiplication tables."

Speaking humorously, a PT instructor stated that he waits until the end of the class to tell his students that they have taken a physics course. Many students had the belief that they could not perform well in a physics class. Also relating to PT is the instructor who stated, "I've enjoyed seeing the kids learn how to interact with each other and how to use the equipment to solve problems."

During the groups, teachers shared stories about students who seemed to blossom during the project. One special education student enrolled in applied math and a machine shop class. "There were times when we would be doing problems dealing with the machine shop, and he would tell me how to do the problems. That really makes them feel good

when they can tell the teacher first-hand, 'well, this is the way we do it, you know.' It made him feel really good."

"All of a sudden, the real quiet, real bashful, real countrified, backward student, did [well on a test], and you can just see a little spark in his eye come up, you know, 'I did this.' So we went on and went through our math, and he excelled in it all the way through. He place first in the district contest last year. Got a full scholarship to Okmulgee now, and going to college, and nobody in his family, as far as he ever knows, has ever gone to college. It sure makes a difference when they can see that they can excel at something."

It appeared, not surprisingly, that it is the at-risk students who have benefitted most from the project. "I've had one student that's been at-risk. He's been a little bit slow and a little bit lazy, but I let him do most of the experiments, and he just loves it. I used him in some today. They were simple, but he thinks it is a big deal to get to do them, so it's really increased his self-esteem. He's brought his average from 75 at the first of the year; he's always in the 80's now."

While changes were evident in individual students, instructors also noted changes in the classes. One teacher stated that absenteeism and behavior problems had declined in her classes as a result of the applied curriculum. "Since I've been teaching the applied math as opposed to the general math, I do not have near the discipline problems I had before, because they're always busy and they're working with their groups and concerned about getting along with those other kids." In addition, "... in general my attendance rates are much higher and the amount of papers that are turned in. Overall I see the kids becoming more active and less discipline problems for me and teaching each other." She believed that these changes were because the students saw the material was applicable to the "real world" and that they could successfully complete the work.

The aspects of the basic skills pilot project which teachers found to be most beneficial included the use of small groups and the integration of the material into existing class work. A number of academic teachers stated how different classes had become since using the small group format suggested in the applied curriculum.

"After using this with the applied math, I have started more group work in my other classes because I find they will ask each other questions where they may not ask me questions when they don't understand something." The positive sentiments regarding group interaction by a teacher at one site were echoed by a teacher at the other site who stated, "My classroom is not teacher-centered. It's definitely people-centered now." Opinions were expressed regarding the need for teachers tc allow noise and students to interact with other students and not just the instructor.

When not discussing students, it appeared that many of the other topics which arose in the focus groups directly or indirectly related to communications. One outcome of the project already noted is the increased communication among teachers, and an increased awareness of what other teachers are doing. "I think one of the good things that came from the whole project is the opportunity to get together with teachers from this area

and to be able to work on. It was like a cooperative process among the schools and the vo-tech to get to know what others are doing, to be able to get a chance to discuss things that were going well and weren't going well."

A number of vocational teachers stated that this project had increased their awareness of the basic skills which are a part of their classwork. As one teacher said, "The basic skills has not changed what I teach. It maybe changed a little bit how I teach it, and how I relate to it. Really, it just reinforces what we're teaching. I really think the vocational teachers have taught this all along. We've been told, 'Okay, now this is a basic skill, and this is what they've identified,' and I think that's helped us a lot."

While this is positive, it also reflected the feeling shared by some vocational instructors that the primary focus of the basic skills project should be in the academic setting, with the vocational teachers reinforcing those skills. This feeling of "us and them" was more prevalent among the vocational teachers, but was not vocalized by all vocational instructors.

Considerations for the Project

All of the teachers were supportive of the basic skills program, and felt it was needed in all schools. They were asked both what should be done differently, and what advice would they give to persons interested in starting such a project. The answers to these two questions were indistinguishable. Teachers would recommend to others what they wish would happen/continue to happen at their schools.

There were three main areas of advice given: basic skills enhancement needs to begin very early, before students are juniors and seniors in high school; teachers need to communicate often and effectively with one another; and they should take advantage of workshops and others who can help.

There is little need to dwell on the first point. There can be little argument with the fact that students need to have basic skills before they can prepare for college or a vocation. "Our classes are pretty well set up. We've got so much we've got to teach and so much area we've got to cover, and then when you throw something else in there you've got to leave something out, or it's really got to go with what you're already teaching in order to get through that course in that period of time so that they can be job-ready and get that job." While the preceding quote is from a vocational instructor, it could also have been made by non-vocational instructor.

One teacher expressed the following 'vision', "I can see where it would really work together if they were learning it in the school here and taking our classes, and of course, that's what it's all about, and we reinforce all those skills they are learning and showing them where they all apply to the workforce. But wouldn't it be ideal if they already had all that so when they came to our area then,... I like to talk about college, let's do this for higher education, or let's do this to get a job and go on to work instead of backing up and trying to pick up something that they've had."

This statement brings up the second major suggestion made, which was that teachers need to communicate. There are a number of aspects to communication. Regarding the general need to communicate, one teacher stated, "We've got to start doing this. General ed and the vo-tech systems and even our area are going to have to buy into this, too. We're going to have to start working together. We're going to get eaten alive if we don't."

Another teacher said, "We're going to have to start communicating and working as a team more and more all the time." Not only did the group participants feel they needed to communicate effectively with one another, they felt they should include other instructors who were not currently involved in the project. "The more you get people involved, the more they'll understand what it's all about and that's it."

One of the most important considerations which came out during both group sessions was the need for vocational and non-vocational teachers to become more aware of the skills taught in each other's classes. "Something else I'd like to see and that is vo-tech teachers going into the academic teachers' classrooms, and vice versa. I know that's hard. You don't want to leave your kids with babysitters, and I don't either. But we're going to have to do that, somehow, or maybe bring my people up there and you bring your people down here." This quote is only one of a number of similar proposals made at each site.

"I think what would be good, they need to have a professional day where the teachers can come to vo-tech and see what we do. That's the thing they need to do, because we haven't done that yet. or they haven't done that in my classes, so I feel like they don't really know. I still think we're going through the administration, and I still feel like everyone else knows, and we're still on the bottom and we don't know exactly what's going on. So what else is new? I think they need to involve us more."

This report has already cited opinions that teachers are not as involved in the planning aspects of the project as they would like to be. There would be, of course, consideration given in order that teachers would not be expected to donate additional time to the project.

Regarding the need to attend workshops, one teacher related, "I definitely think before a teacher goes into this, they need to attend some workshops. I did not have that privilege, and it was like the spring of last year before I ever attended a workshop to realize what I was supposed to be doing, what the course was designed for."

In addition to attending workshops, teachers expressed the need to have contact with persons at the Oklahoma Department of Vocational and Technical Education. Said one teacher, "It was good to be able to visit with some of the people from the State Department, too, like Belinda McCharen and some of them, that work with this."

Conclusions

The first item which should be noted in this conclusion is that it is too early to make final judgements about the basic skills pilot projects. One may examine indications and some determination about the direction in which the projects are heading; however, it is too soon for judgements.

With this caveat in mind, it is appropriate to identify a number of positive outcomes observed. These outcomes include the positive changes in student performance and self-esteem, the changes which individual teachers have experienced in the manner in which they approach basic skills and teaching in general, and the increased awareness of and communication among teachers.

While enhanced communication was identified as a positive outcome of the project, it was also seen as the greatest need. An important goal for teachers is to communicate more effectively with one another, with administrators, with personnel at the Oklahoma Department of Vocational and Technical Education, and members of the local communities.

Teachers were aware that increased communication would take more time. They would like to develop methods for allowing communication without adding to their already overburdened schedules.

In spite of the frustrations experienced in the two years of the basic skills project, each of the group members made an overall positive assessment of the process and outcomes so far.

"Those students are learning skills that they're going to take out into the work force. It has also given those kids a lot of success."